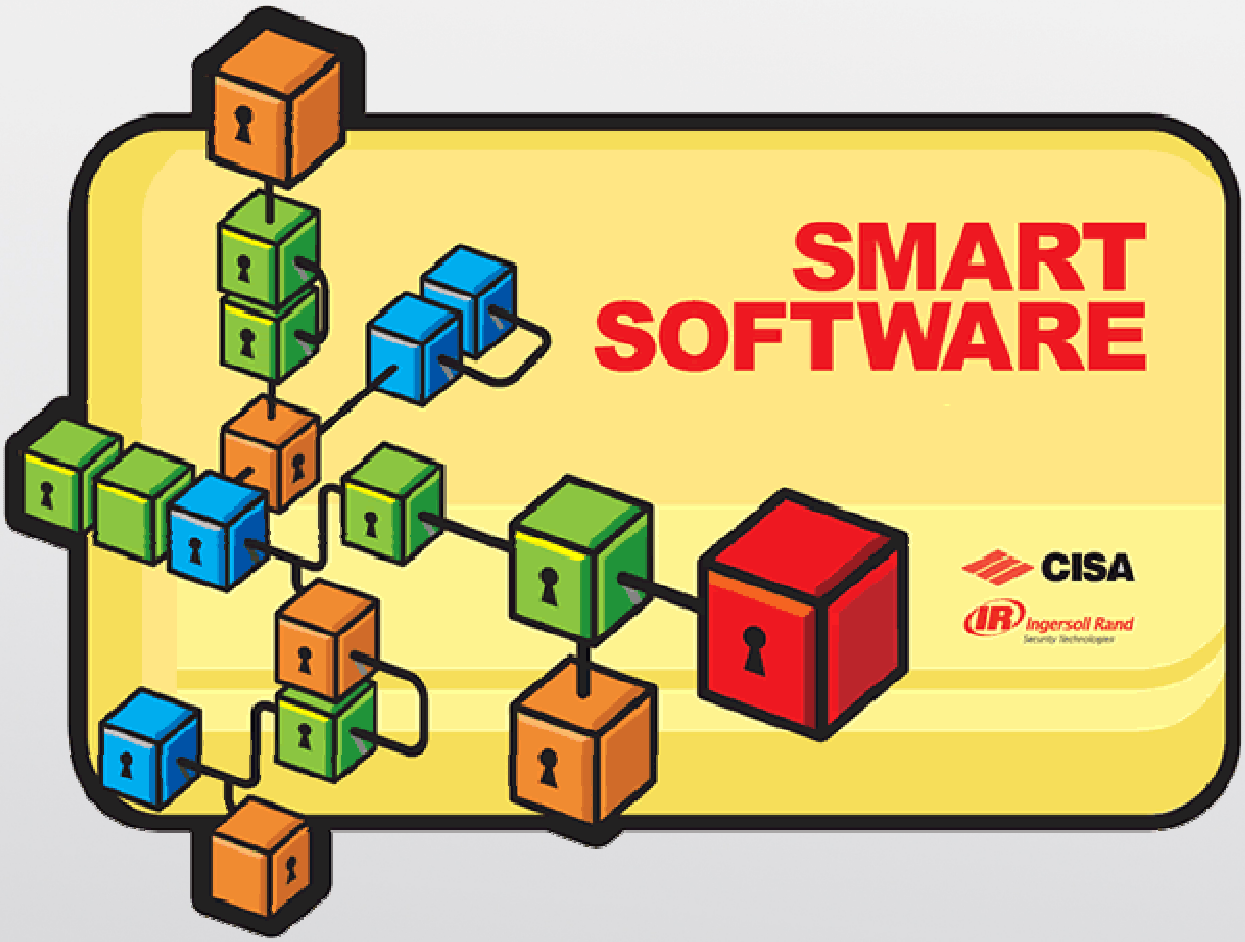
CISA

Smart Software
User's Manual



Ingersoll Rand
Security Technologies

SSWUSERMANUAL106

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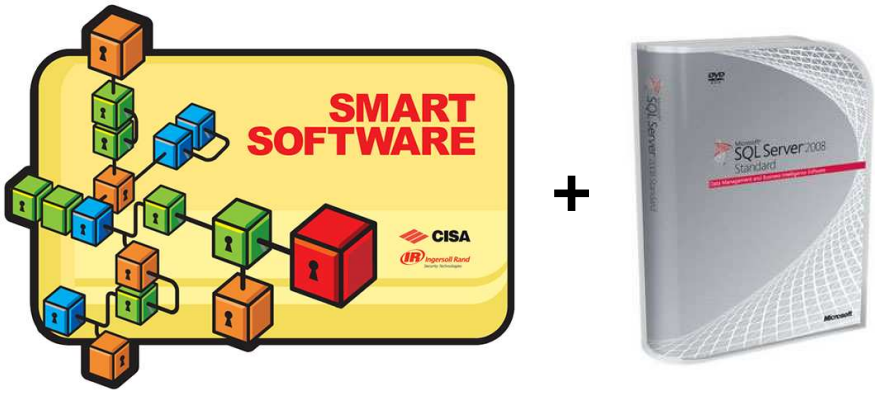
INSTALLATION

This software package is composed of Microsoft SQL Server and the actual Cisa administration software, Smart Software; both components are required for the software package to work. The free Express Edition of Microsoft SQL Server 2008 is included in the distribution.



SYSTEM REQUIREMENTS

Processor: 1GHz processor or faster
Hard Drive: 1 GB available
RAM: 512 MB (1 GB recommended)
Framework: MS .NET 2.0 SP2
Ethernet adapter (only for client-server installations or in combination with Cisa devices with Ethernet connection)
RS-232 DB9 serial port (only in combination with Cisa devices with RS-232 connection)
Display with minimum resolution of 1024 x 768 recommended
Operating System: any of the following versions:

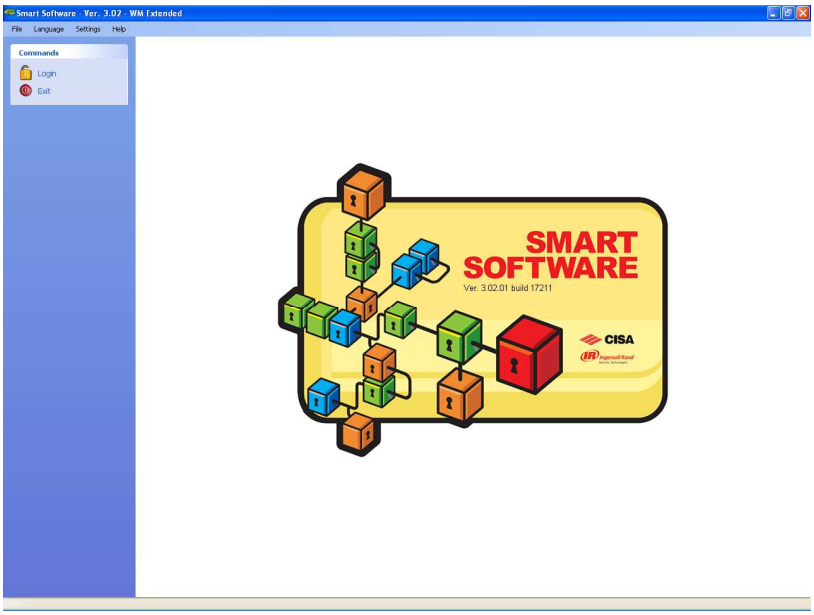
- Windows 2000 (SP4 recommended)
- Windows XP with SP2 (SP3 recommended)
- Windows Vista Home, Premium, Business, Ultimate or Enterprise with SP1
- Windows 7 (32 bit and 64 bit)

INSTALL PROCEDURE

1. The first component to be installed should be the SQL Server. If any version of this software is not already present on the PC, it is possible to find the installer of SQL Server 2008 Express R2 inside the CD-ROM. Explore it and browse to the **ISSetupPrerequisites** folder; run the correct installer, accordingly to the operating system type:
    a. SQLEXPRWT_x86_ENU.exe for 32 bit operating systems
    b. SQLEXPRWT_x64_ENU.exe for 64 bit operating systems

It is recommended to accept the default settings for each screen and proceed through the install wizard.
Note: some operating systems may request the installation of Windows Installer 4.5 prior to SQL Server 2008. This package is available on the Microsoft Website.
2. When SQL Server is installed, double click on Setup.exe to install the Smart Software.
3. After the installation of both SQL Server Express and Smart Software, restart the PC.

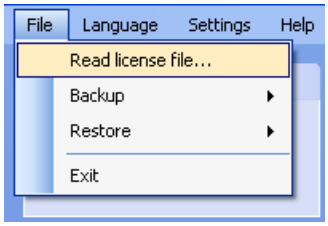
START-UP



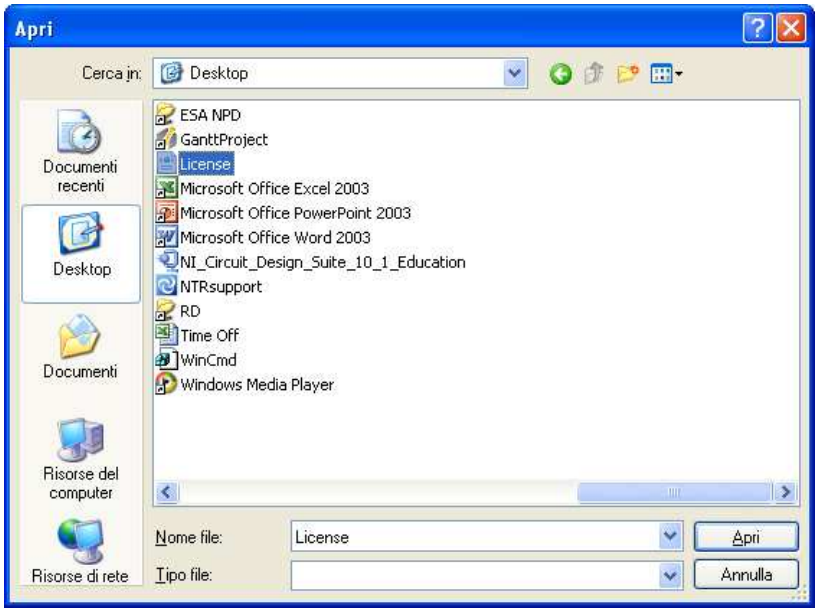
LICENSING

The first time the software is used, it is necessary to load the license file provided. The license is an .xml file supplied by CISA Technical Assistance; once received, it must be copied inside the PC on which the Smart Software is installed.

1) Click



2) Locate the license .xml file on the computer and click Open.



LANGUAGE

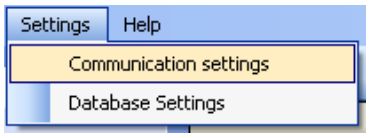
To change the software language, click

The available languages are: English Italian French Spanish Catalan

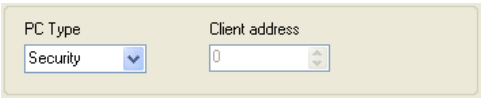
SETTINGS

The Smart Software settings can only be edited if the user is not logged in.

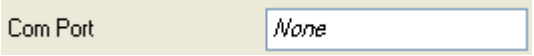
COMMUNICATION SETTINGS

1) Click 

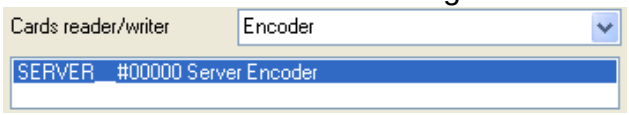
2) Set the PC type and, if needed, the Client address.
Security: if the Smart Software is installed only on one PC, it is necessary to select the Security option, the default one. The Security PC has all the functionalities.
Client: if the Smart Software is installed on more than one PC, it is necessary to configure all the PCs different from the Security one as Clients. Clients are characterized by progressive addresses (to be set) and have limited functionalities.



3) If the Encoder is connected through a Com Port, set it here:

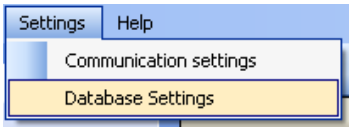


4) Choose the reader/writer type.
Encoder: a Cisa system encoder (M180, M201 or M305).
Smart Card reader/writer integrated in the PC where the Smart Software is installed.



5) Click to accept or to cancel.

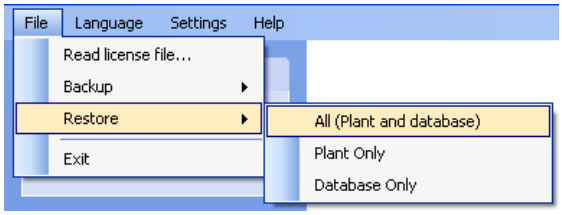
DATABASE SETTINGS

1) Click 

2) If Microsoft SQL Server 2008 Express is used, leave the default settings.
If a different SQL Server is used, set the connection parameters based on its configuration.
3) Click to accept or to cancel.

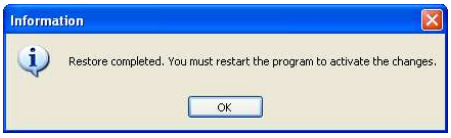
RESTORE

To restore the desired plant on the Smart Software:

1) Click 

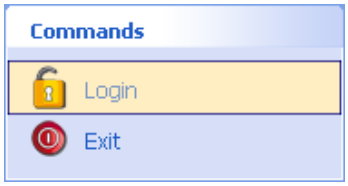
2) Choose whether to restore the Plant configuration, the Database or both:
Plant file contains static data such as Locks, Zones and Categories.
Database contains information saved while using Smart Software (e.g. about Users).

3) The backup file to be restored is supplied by CISA Technical Assistance Centre and is located on the computer hard drive. Locate the backup plant_name.arj file and click Open.

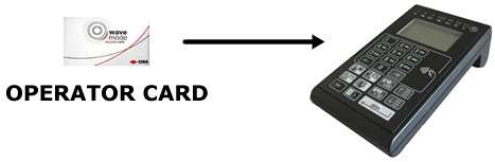
4) When this message window appears, click Ok. The software closes automatically.


5) Restart the Smart Software by clicking on the desktop icon

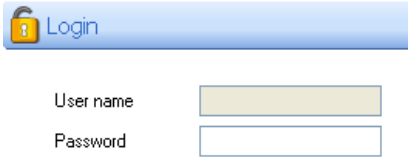
LOGIN

1) Check that the plant restored on the Smart Software is the same stored on the Encoder.
2) Click 

3) The Encoder will beep and show the message “Read PC. Oper”
4) Place the operator card on the encoder



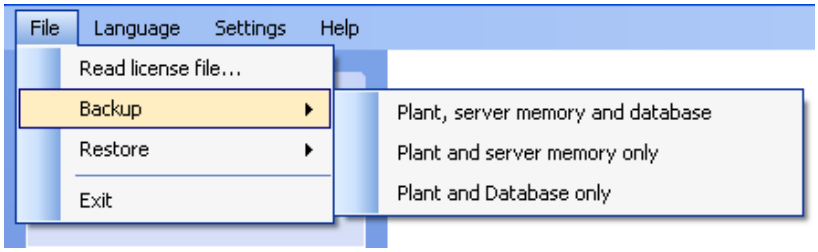
5) Type in the operator password:



6) Click

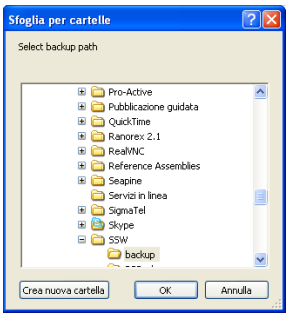
BACKUP

To create a backup file of the plant managed with the Smart Software:

1) Click 

2) Choose the data which must be included in the backup file:
   Plant contains the static plant data.
   Database contains information saved while using the Smart Software.
   Server Memory is the set of information stored in the server's memory.

3) Select the folder where the backup file should be saved and click Ok.



LOGOUT

To log out from the Smart Software, from any screen click

Once the user has logged out, to access the Smart Software again it is necessary to perform the login procedure.

EXIT

To exit from the Smart Software, from any screen click

If the user is logged in, a warning message appears:

To exit anyway, click Ok.

MENU SIDE PANEL

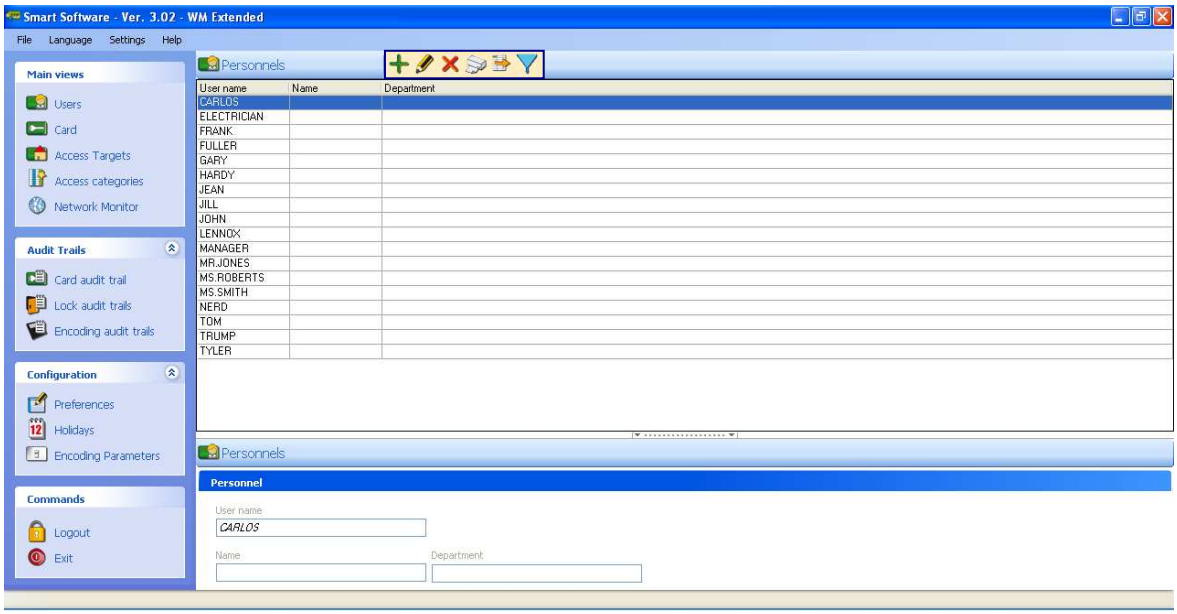
The side panel acts as a navigation tool during the use of the Smart Software. It is divided into 4 sections; within each, there is set of functions logically grouped together.

To create and manage users.[1]
Card creation and management.
To visualize locks, zones and beds.
To create and manage Categories (groups of utilities).[2]
View of the devices currently connected to the network.
To load card history events from Special Access Control units.
Displays history of lock events stored in the encoder.
Displays history of encoding events.
To set general parameters.
To manage the access during the year holidays.
Defines default parameters used when encoding cards.
To disconnect the operator from the current session.
To close the application.

[1] Only if User Descriptions are enabled in the Preferences section.
[2] Only if any categories have been defined during the plant configuration.

COMMON ICONS

These are the icons common to several sections of the Smart Software. In addition, each screen has icons that pertain to that particular function. By moving the mouse over each icon, the name/function of the icon will be displayed.



Add: used to add a new entry (e.g. a new user) to the list. Once clicked, blank fields in the panel below will show up to be edited.

Edit: used to edit the properties of a selected entry. Once clicked, edits can be made in the panel below and then accepted or declined with .

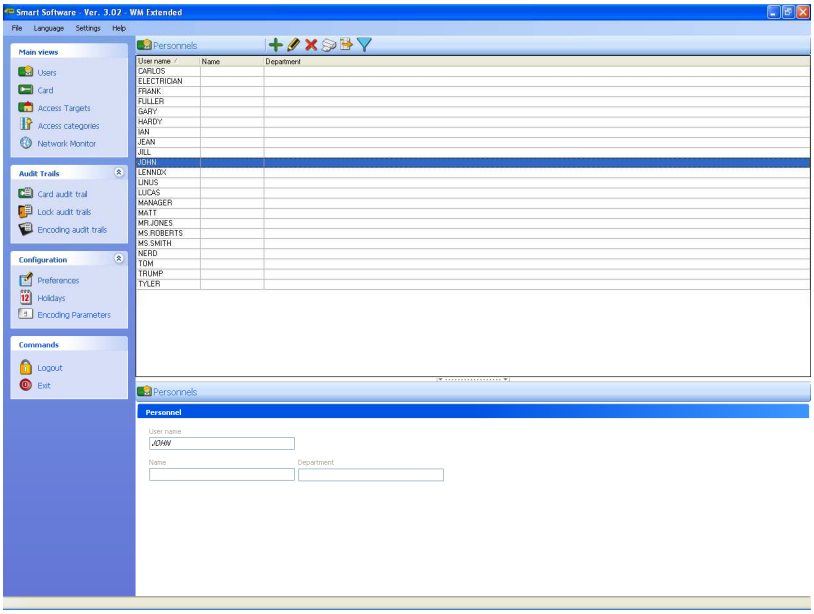
Delete: used to remove an entry from the list. First click on the desired entry and then click the delete icon; a confirmation pop-up will appear.

Filter: used to search for records by narrowing down the choices that closely match what is typed. Once clicked, an empty row will show up at top, where the user has to type what he/she is searching for. All the parameters entered for the filtering operation are considered in logical AND. The results can be ordered by clicking on the desired column.

Clear: it clears the current visualization.

Print: used to print what is currently being displayed on the screen. A separate preview screen will show, allowing the user to physically print the document or to export the list in one of the several available formats (Adobe .pdf, Microsoft Excel .xls, Microsoft Word .doc, Crystal Reports .rpt, Rich Text Format .rtf)

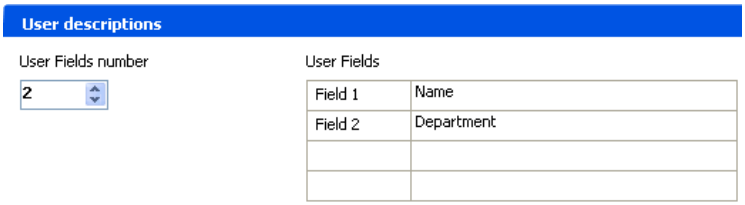
USERS



To **enable** the User management:

1) Click

2) Click
3) Set the desired number of User Fields, and their description

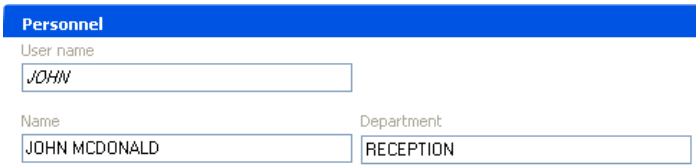


4) Click to accept changes.

FEATURES

From the Users screen, it is possible to:

Add a new user, typing Name and a value for each of the custom user fields;



Edit an existing user, typing new values for the custom user fields;

Remove an existing user;

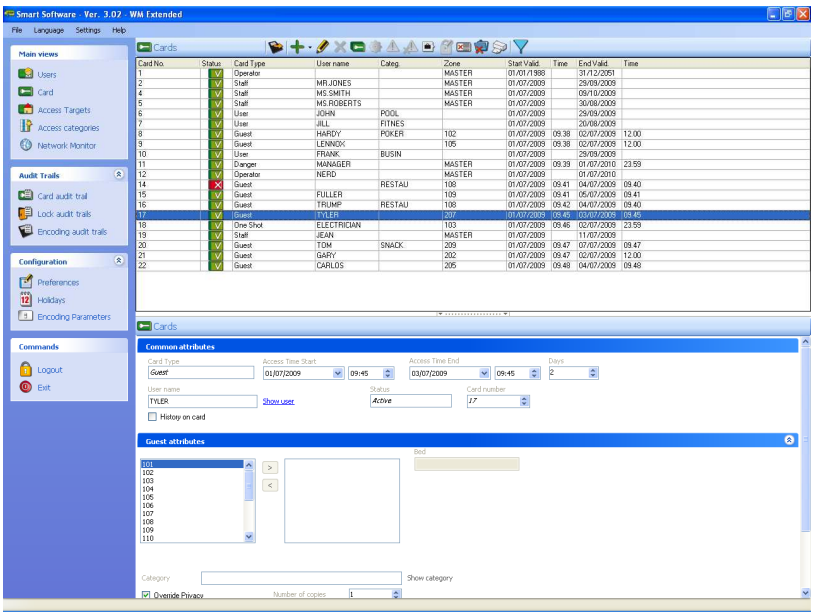
Search from the user list, using one or more criteria;

Import a user list from a .csv file;

Print or export the user list.

Note: every time a card is issued, the correspondent User Name is added to the User list.

CARDS



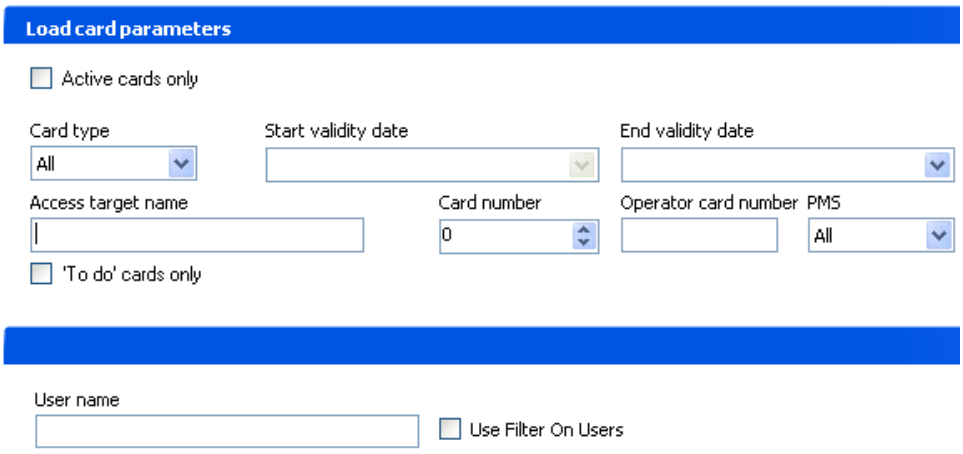
LOAD CARDS

This operation allows to load on the Smart Software the cards stored in the Encoder memory; these cards will be presented in the form of a list.

1) From any screen, click

2) Click

3) To load all cards, insert no parameters. If desired, type any parameter to select which set of cards should be loaded.

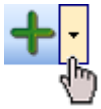


4) Click to accept or to cancel.

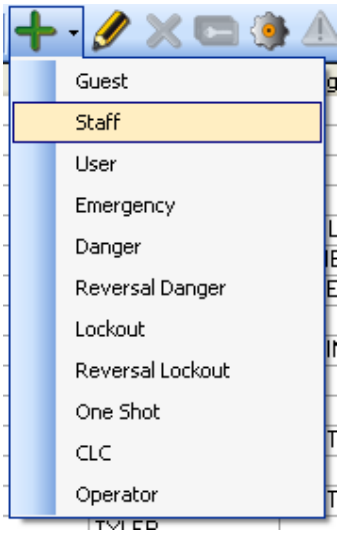
CREATE CARDS

This operation allows to create new cards.

1) From any screen, click

2) Click on the arrow of button 

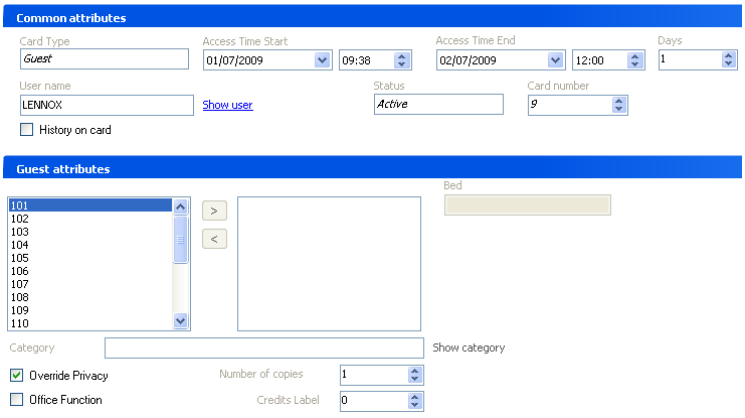
3) Select which type of card is to be created.



Note: the entries on the list depend on the hierarchical level of the Operator who logged in.

Now, if you simply click , the software will create a card of the same type of the previous one.

4) Type the desired parameters, dependently on the card type:



5) Click to accept changes.

6) The encoder will beep.
7) Put a card on the encoder's keyboard.

EDIT CARDS

This operation allows to edit the parameters of existing cards.

Card types: all

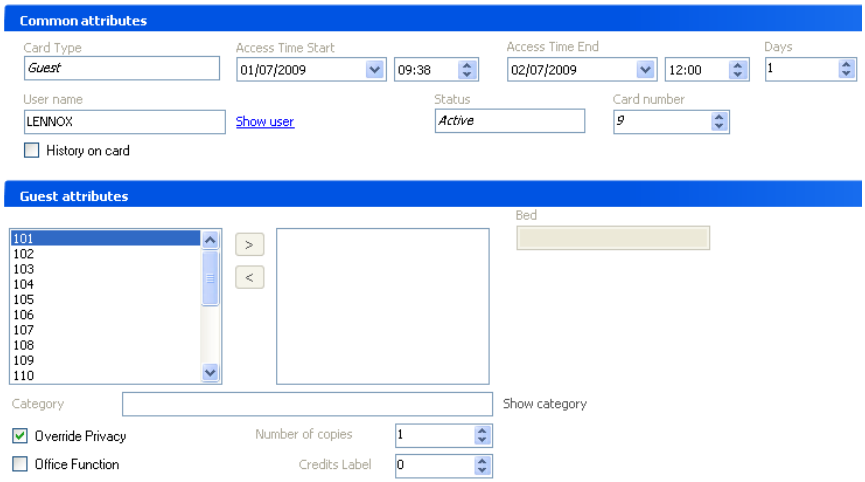
1) From any screen, click

2) Click on the desired card to edit, out of the list of available cards. If the card is not in the list, then present it to the encoder: it will be read and shown up.

Card No.	Status	Card Type	User name	Categ.	Zone	Start Valid.	Time	End Valid.	Time
1		Operator			MASTER	01/01/1988		31/12/2051	
2		Staff	MR.JONES		MASTER	01/07/2009		29/09/2009	
4		Staff	MS.SMITH		MASTER	01/07/2009		09/10/2009	
5		Staff	MS.ROBERTS		MASTER	01/07/2009		30/08/2009	
6		User	JOHN	POOL		01/07/2009		29/09/2009	
7		User	JILL	FITNES		01/07/2009		20/08/2009	
8		Guest	HARDY	POKER	102	01/07/2009	09.38	02/07/2009	12.00
9		Guest	LENNOX		105	01/07/2009	09.38	02/07/2009	12.00
10		User	FRANK	BUSIN		01/07/2009		29/09/2009	

3) Click

4) Make the desired field changes:



5) Click to accept changes or to cancel.

6) The encoder will beep.

7) Put a card on the encoder's keyboard.

CARD COPY

This should be done to create an identical copy of a Guest card. The new card won't disable the access for the original one.

Card types: Guest.

Case of use: to give each member of the guests party a key to access their bedroom / apartment.

1) From any screen, click

2) Click on the desired card to copy, out of the list of available cards. If the card is not in the list, then present it to the encoder: it will be read and shown up.

Card No.	Status	Card Type	User name	Categ.	Zone	Start Valid.	Time	End Valid.	Time
1		Operator			MASTER	01/01/1988		31/12/2051	
2		Staff	MR.JONES		MASTER	01/07/2009		29/09/2009	
4		Staff	MS.SMITH		MASTER	01/07/2009		09/10/2009	
5		Staff	MS.ROBERTS		MASTER	01/07/2009		30/08/2009	
6		User	JOHN	POOL		01/07/2009		29/09/2009	
7		User	JILL	FITNES		01/07/2009		20/08/2009	
8		Guest	HARDY	POKER	102	01/07/2009	09.38	02/07/2009	12.00
9		Guest	LENNOX		105	01/07/2009	09.38	02/07/2009	12.00
10		User	FRANK	BUSIN		01/07/2009		29/09/2009	

3) Click

4) Choose if the copy must override the Privacy Function:

5) Click to accept changes or to cancel.

6) The encoder will beep.

7) Put a card on the encoder's keyboard.

CARD RECODING

This operation allows changes of several parameters / access rights of a card by simply presenting it to a special access control unit configured as a validator. This function is available only using CT4 cards.

Card types: Staff or User.

Case of use: the systems manager wants to lengthen the validity of a staff member's card. The manager does not need to obtain the card from the staff member, but can simply change the validity through the Smart Software. When the staff member presents the card to a special access control unit positioned e.g. in the hotel main entrance, the card validity is changed.

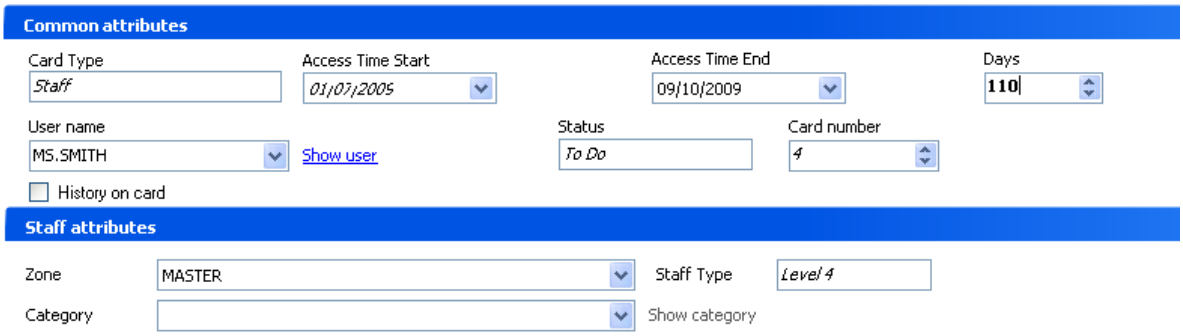
1) From any screen, click

2) Click on the desired card to recode, from the list of available cards. If the card is not in the list, it is possible to present it to the encoder: it will be read and shown up.

Card No.	Status	Card Type	User name	Categ.	Zone	Start Valid.	Time	End Valid.	Time
1		Operator			MASTER	01/01/1988		31/12/2051	
2		Staff	MR.JONES		MASTER	01/07/2009		29/09/2009	
4		Staff	MS.SMITH		MASTER	01/07/2009		09/10/2009	
5		Staff	MS.ROBERTS		MASTER	01/07/2009		30/08/2009	
6		User	JOHN	POOL		01/07/2009		29/09/2009	
7		User	JILL	FITNES		01/07/2009		20/08/2009	

3) Click (To Do button)

4) Edit the fields you want to modify:



5) Click to accept changes or to cancel.

6) A row with the information of the recoded card appears; its Status icon represents a gear:

Card No.	Status	Card Type	User name	Categ.	Zone	Start Valid.	Time	End Valid.	Time
1		Operator			MASTER	01/01/1988		31/12/2051	
2		Staff	MR.JONES		MASTER	01/07/2009		29/09/2009	
4		Staff	MS.SMITH		MASTER	01/07/2009		09/10/2009	
29		Staff	MS.SMITH		MASTER	01/07/2009		19/10/2009	
6		User	JOHN	POOL		01/07/2009		29/09/2009	
7		User	JILL	FITNES		01/07/2009		20/08/2009	

7) When the card is presented to the validator, the parameters are changed.
In the Smart Software, the Status icon of the older card turns to red, while that of the recoded card turns to green:

Card No.	Status	Card Type	User name	Categ.	Zone	Start Valid.	Time	End Valid.	Time
1		Operator			MASTER	01/01/1988		31/12/2051	
2		Staff	MR.JONES		MASTER	01/07/2009		29/09/2009	
4		Staff	MS.SMITH		MASTER	01/07/2009		09/10/2009	
29		Staff	MS.SMITH		MASTER	01/07/2009		19/10/2009	
6		User	JOHN	POOL		01/07/2009		29/09/2009	
7		User	JILL	FITNES		01/07/2009		20/08/2009	

SUSPEND

This operation, easily reversed by using the Restore command, allows to temporarily suspend the validation of a card in which the correspondent function is enabled. **Validation** allows to have further control on the validity in the moment of issuing cards, by setting a validation delay: inside this period of time, the owner of the card has to pass it on a special door in order to refresh the validity of the card. If the validation time has expired and the card has not been presented to the special lock, the access rights of the card are not valid anymore: to recover these rights, the card has to be presented to the validator.

Card types: Staff or User.

Case of use: a student residing in a campus accesses his/her room with a user card, but has not paid the monthly rent yet. The campus director can suspend the validation of the user card (therefore suspending its validity); when the student pays the rent, his/her card can be restored.

1) From any screen, click

2) Click on the desired card to suspend (with **validation** function **enabled**). If the card is not in the list, it is possible to present it to the encoder: it will be read and shown up.

24		Guest	IAN		201	01/07/2009	14.41	02/07/2009	12.00
26		Staff	LINUS		MASTER	01/07/2009		29/09/2009	
27		Staff	LINUS		MASTER	01/07/2009		03/10/2009	
30		Guest	MATT		110	07/07/2009	16.44	08/07/2009	12.00
31		Staff	JEFF		MASTER	08/07/2009		01/10/2009	

3) Click and confirm

4) The Status icon of the suspended card turns to orange:

24		Guest	IAN		201	01/07/2009	14.41	02/07/2009	12.00
26		Staff	LINUS		MASTER	01/07/2009		29/09/2009	
27		Staff	LINUS		MASTER	01/07/2009		03/10/2009	
30		Guest	MATT		110	07/07/2009	16.44	08/07/2009	12.00
31		Staff	JEFF		MASTER	08/07/2009		01/10/2009	

RESTORE

This operation allows to reverse a Suspend command on a card in which the validation function is enabled.

1) From any screen, click

2) Click on the suspended card to restore, from the list of available cards.

24		Guest	IAN		201	01/07/2009	14.41	02/07/2009	12.00
26		Staff	LINUS		MASTER	01/07/2009		29/09/2009	
27		Staff	LINUS		MASTER	01/07/2009		03/10/2009	
30		Guest	MATT		110	07/07/2009	16.44	08/07/2009	12.00
31		Staff	JEFF		MASTER	08/07/2009		01/10/2009	

3) Click and confirm

4) The Status icon of the restored card turns to green:

24		Guest	IAN		201	01/07/2009	14.41	02/07/2009	12.00
26		Staff	LINUS		MASTER	01/07/2009		29/09/2009	
27		Staff	LINUS		MASTER	01/07/2009		03/10/2009	
30		Guest	MATT		110	07/07/2009	16.44	08/07/2009	12.00
31		Staff	JEFF		MASTER	08/07/2009		01/10/2009	

CHECKOUT

This operation allows the cancellation of a guest card even if the physical card is not present.

Card types: Guest.

Case of use: when a guest checks out of the hotel.

When the operation is done, the checked out card is disabled from access to on-line special control units. However, the same card will open the correspondent stand-alone lock until its expiration.

1) From any screen, click

2) Click on the desired card to check out, from the list of available cards. If the card is not in the list, it is possible to present it to the encoder: it will be read and shown up.

Card No.	Status	Card Type	User name	Categ.	Zone	Start Valid.	Time	End Valid.	Time
1		Operator			MASTER	01/01/1988		31/12/2051	
2		Staff	MR.JONES		MASTER	01/07/2009		29/09/2009	
4		Staff	MS.SMITH		MASTER	01/07/2009		09/10/2009	
5		Staff	MS.ROBERTS		MASTER	01/07/2009		30/08/2009	
6		User	JOHN	POOL		01/07/2009		29/09/2009	
7		User	JILL	FITNES		01/07/2009		20/08/2009	
8		Guest	HARDY	POKER	102	01/07/2009	09.38	02/07/2009	12.00
9		Guest	LENNOX		105	01/07/2009	09.38	02/07/2009	12.00
10		User	FRANK	BUSIN		01/07/2009		29/09/2009	

3) Click

4) The Status icon of the checked out card turns to red:

Card No.	Status	Card Type	User name	Categ.	Zone	Start Valid.	Time	End Valid.	Time
1		Operator			MASTER	01/01/1988		31/12/2051	
2		Staff	MR.JONES		MASTER	01/07/2009		29/09/2009	
4		Staff	MS.SMITH		MASTER	01/07/2009		09/10/2009	
5		Staff	MS.ROBERTS		MASTER	01/07/2009		30/08/2009	
6		User	JOHN	POOL		01/07/2009		29/09/2009	
7		User	JILL	FITNES		01/07/2009		20/08/2009	
8		Guest	HARDY	POKER	102	01/07/2009	09.38	02/07/2009	12.00
9		Guest	LENNOX		105	01/07/2009	09.38	02/07/2009	12.00
10		User	FRANK	BUSIN		01/07/2009		29/09/2009	

CANCELLATION

This operation allows the cancellation of a guest card even if the physical card is not present. A **cancellation card** will be created: by presenting this one to the stand-alone locks, the cancelled card will be included in the locks black list. The on-line locks both special and wireless are automatically updated.

Card types: Guest, Staff, User or Operator.

Case of use: when a staff member is fired, his/her card should not be able anymore to open locks he/she had access to.

When the cancellation card is presented to the stand-alone locks, the cancelled card is disabled from access to the locks. For special access and wireless, it is necessary to wait 10 minutes (latency time) for the cancelled card/s to be disabled.

1) From any screen, click

2) Click on the desired card to cancel, from the list of available cards. If the card is not in the list, it is possible to present it to the encoder: it will be read and shown up.

Card No.	Status	Card Type	User name	Categ.	Zone	Start Valid.	Time	End Valid.	Time
1	V	Operator			MASTER	01/01/1988		31/12/2051	
2	V	Staff	MR.JONES		MASTER	01/07/2009		29/09/2009	
4	V	Staff	MS.SMITH		MASTER	01/07/2009		09/10/2009	
5	V	Staff	MS.ROBERTS		MASTER	01/07/2009		30/08/2009	
6	V	User	JOHN	POOL		01/07/2009		29/09/2009	
7	V	User	JILL	FITNES		01/07/2009		20/08/2009	
8	V	Guest	HARDY	POKER	102	01/07/2009	09.38	02/07/2009	12.00
9	V	Guest	LENNOX		105	01/07/2009	09.38	02/07/2009	12.00
10	V	User	FRANK	BUSIN		01/07/2009		29/09/2009	

3) Click

4) The Status icon of the cancelled card turns to red:

Card No.	Status	Card Type	User name	Categ.	Zone	Start Valid.	Time	End Valid.	Time
1	V	Operator			MASTER	01/01/1988		31/12/2051	
2	V	Staff	MR.JONES		MASTER	01/07/2009		29/09/2009	
4	V	Staff	MS.SMITH		MASTER	01/07/2009		09/10/2009	
5	V	Staff	MS.ROBERTS		MASTER	01/07/2009		30/08/2009	
6	V	User	JOHN	POOL		01/07/2009		29/09/2009	
7	V	User	JILL	FITNES		01/07/2009		20/08/2009	
8	X	Guest	HARDY	POKER	102	01/07/2009	09.38	02/07/2009	12.00
9	V	Guest	LENNOX		105	01/07/2009	09.38	02/07/2009	12.00
10	V	User	FRANK	BUSIN		01/07/2009		29/09/2009	

5) The encoder will beep.
6) Put a card on the encoder's keyboard.

7) The cancellation card must be presented to all the stand-alone locks, to put the cancelled card in their black list. It is not necessary to present it to the on-line (special and wireless) locks, since they are automatically updated.

SET PASSWORD

This operation allows to change the password of an Operator card; for this function to be available, the login on the Smart Software must have been done with an Operator card with the sufficient hierarchy.

Card types: Operator.

1) From any screen, click

2) Click on the Operator card for which the password must be set. If the card is not in the list, it is possible to present it to the encoder: it will be read and shown up.

Card No.	Status	Card Type	User name	Categ.	Zone	Start Valid.	Time	End Valid.	Time
1		Operator			MASTER	01/01/1988		31/12/2051	
2		Staff	MR.JONES		MASTER	01/07/2009		29/09/2009	
4		Staff	MS.SMITH		MASTER	01/07/2009		09/10/2009	

3) Click

4) Type the desired password:

5) Click to accept changes or to cancel.

CLEAR

This operation allows to clear the current visualization of cards. The cards are not deleted from the encoder's memory but only from the screen.

Click and confirm.

PRINT

This operation allows to print the card list on paper or to export it in several formats.

1) Click

2) A new window with a detailed card list opens.

   Click to print the list.

   Click to export the list; choose path, file name and format between:

   - Adobe (.pdf)
   - Microsoft Excel (.xls)
   - Microsoft Word (.doc)
   - Crystal Reports (.rpt)
   - Rich Text Format (.rtf)

ACCESS TARGETS

LOCKS

This screen reports the list of the locks included in the plant restored on the Smart Software. To access this screen:

1) From any screen, click

2) Click

3) The list of the locks included in the system is visualized

Name	Description	Hidden	Battery level	Last reading	Antenna Signal	Last reading	Office Function	Door Status
101	Wireless	☐		12/07/2010 6.14		12/07/2010 6.14		
201	Wireless	☐		12/07/2010 9.02		12/07/2010 9.02		
301	Wireless	☐		12/07/2010 9.31		12/07/2010 9.31		⚠
302	Wireless	☐		12/07/2010 9.02		05/07/2010 10.42		
303	Stand-Alone	☐		05/07/2010 10.42				
SAUNA	Wireless	☐		12/07/2010 7.22		08/07/2010 19.08	⚠	
UTIL#1	Wireless	☐		12/07/2010 9.02		12/07/2010 5.06		

This screen contains, for each lock, the following data:

- name and description;
- visibility indicator: if the checkbox is checked, the lock is hidden;
- battery level with last reading date and time[3];
- antenna signal level with last reading date and time[4];
- office function indicator: the ⚠ symbol indicates that the function is active[4];
- door status indicator: the ⚠ symbol indicates that the door is open[4,5].

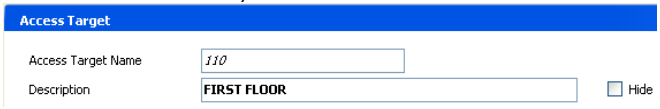
EDIT LOCK PARAMETERS

1) Click on the desired lock from the list:

Name	Description	Hidden	Battery level	Last reading	Antenna Signal	Last reading	Office Function	Door Status
101	Wireless	☐		12/07/2010 6.14		12/07/2010 6.14		
201	Wireless	☐		12/07/2010 9.02		12/07/2010 9.02		
301	Wireless	☐		12/07/2010 9.31		12/07/2010 9.31		⚠

2) Click

3) **Description**: will show up next to the locks name when creating a new card.
Hide: if selected, the lock will not be visible when creating new cards.



4) Click to accept changes or to cancel.

PRINT LOCK LIST

Click and choose whether to print or to export the lock list from the separate screen which opens.

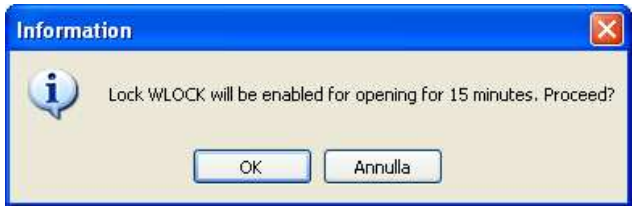
[3] The battery level reading is done by remote for wireless locks, through the History on Card feature for stand-alone locks.
[4] Data available only for wireless locks.
[5] The open door alert is activated after 1 minute from the lock opening

FUNCTIONALITIES FOR WIRELESS LOCKS

The following functionalities are available for wireless locks only. To use them, select a lock from the list, then click on the button corresponding to the desired function.

REMOTE LOCK OPENING

Using this function, it is possible to open the selected lock by remote, setting it in Office function for 15 minutes. There will be a latency time of 1 minute between the command emission and its actuation.

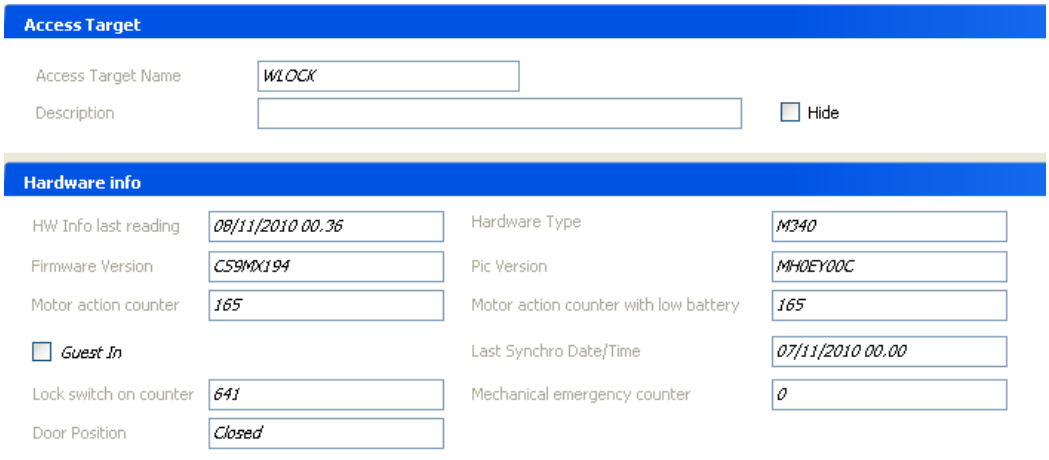
1) Click
2) Confirm lock opening 

3) In the Office Function column, the ▲ symbol will be visible for the following 15 minutes.

LOCK HARDWARE INFO

Thanks to this function, it is possible to obtain the hardware information regarding the selected wireless lock.

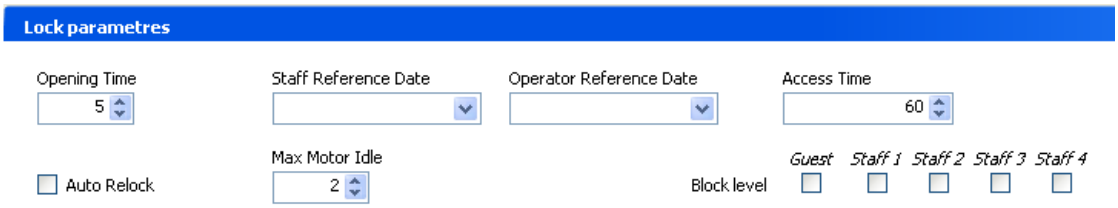
1) Click
2) The hardware info panel will be shown below the lock basic parameters one



LOCK ADVANCED PARAMETERS

It is possible to set the advanced parameters for the selected wireless lock.

1) Click
2) The advanced parameters panel will be shown below the lock basic parameters one

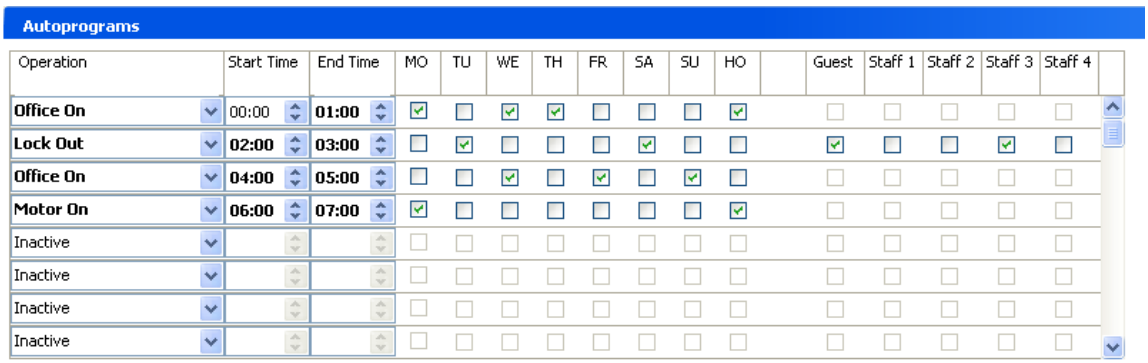


3) To set or modify the parameters, click
4) Perform the desired modifications.
5) Click to accept changes or to cancel.

AUTOPROGRAMS

Thanks to this function, it is possible to set on the selected wireless lock up to 8 autoprograms, choosing for each one type and validity period.

1) Click
2) The autoprograms panel will be shown below the lock basic parameters one



3) To set or modify the parameters, click
4) Insert the desired autoprograms, choosing the respective validity period, between:
   - Office function: lock remains open for the selected time period;
   - Lock out: the selected card types are disabled from opening the lock;
   - Motor on: lock internal motor is switched on.
5) Click to accept changes or to cancel.

SYSTEM WIRELESS FEATURES

Reported in the following tables, introduced thanks to the wireless extension for Wave Mode systems.

Remote system management

FUNCTION	WAVE MODE WIRELESS
Audit trial retrieval	Access data is available at the central computer: no limits imposed on data storage in stand-alone locks. *(latency time: 1min)*
Staff and Guest card cancellation	The individual staff card can be cancelled from the lock by wireless connection from reception *(latency time: 10min)*
Staff Monitoring	A report can be generated automatically to show all accesses by an employee to any room, a group of rooms or all rooms *(latency time: 1min)*
Remote door opening	Possibility to open the lock by remote command *(latency time: 1min)*

Remote diagnostic and maintenance

FUNCTION	WAVE MODE WIRELESS
Door status	If door is left opened for more than a preset time, a special alert can be issued at the security office *(latency time: 1 min)*
Lock settings and diagnostics (change lock parameters)	Remote operations (hardware information, opening time, autoprograms, lockout, etc…) *(latency time: 1 min)*
Low battery status	The battery level for wireless lock is reported to the engineering computer terminal on each event on the lock
Accurate time-keeping, Holidays table, Daylight saving time table.	Automatic lock synchronization from central station (once a day). DST and Holidays (once a week).
Wireless field quality	The wireless field quality for wireless lock is reported to the engineering computer terminal on each event on the lock
Wireless Analyzer tool	Installation tool (Wave Mode Mobile + Analyzer antenna) to perform wireless field analysis for plant installation and maintenance.

BATTERY STATUS REPORTING

Each lock shows the level of its operating battery. The possible battery status levels shown on the screen are as follows:

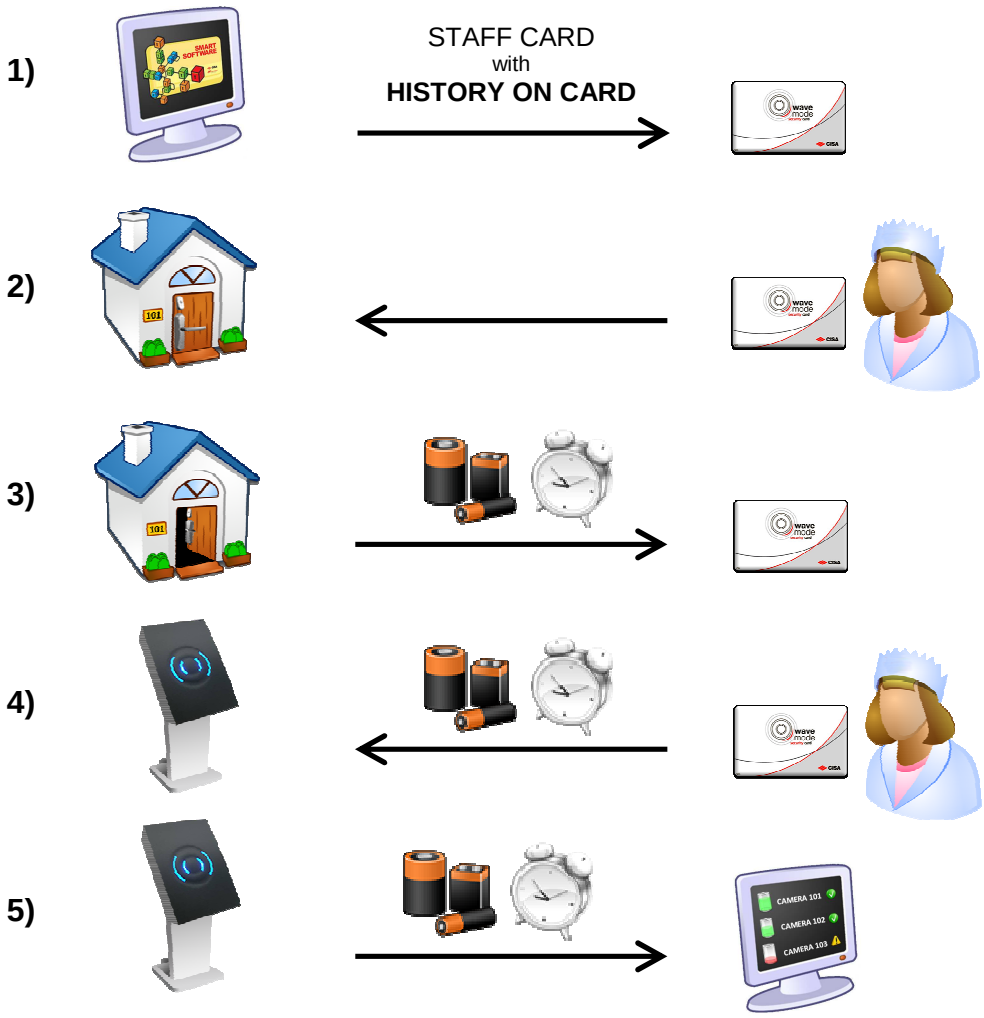
	100%
*	75%
*	50%
	25%
	10% or less

* These levels are only visible in plants with Wave Mode locks.

This information is collected in different ways dependently with the type of lock.

STAND-ALONE LOCK

The battery level will be visible on the Smart Software only if the **History on Card** function has been **enabled** in the plant during configuration. The battery status visualized on the screen is not evaluated in real time, but it corresponds to the time reported in the Last Reading column, i.e. the last time the lock has been opened by a Staff card, which has been later presented to an on-line validator.



WIRELESS LOCKS

The battery level reading is enabled by default. The battery status is automatically sent to the Smart Software each time an event on the lock happens. Therefore, the Last Reading time visualized on the screen is in real time, apart from 1 minute of latency time.

ZONES

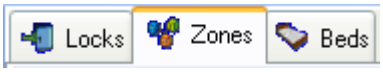
This screen reports the list of the zones included in the plant restored on the Smart Software.

A **Zone** is a group of locks, defined during the configuration of the plant by a Cisa technician. The locks included into a zone cannot be changed through the Smart Software. Each plant has a zone which includes all the locks: it is called Master zone.

Case of use: a staff member must have access to all the locks in the first floor of a building; it is possible to create a zone called FLOOR1 and then give that zone as input for the Staff member's card.

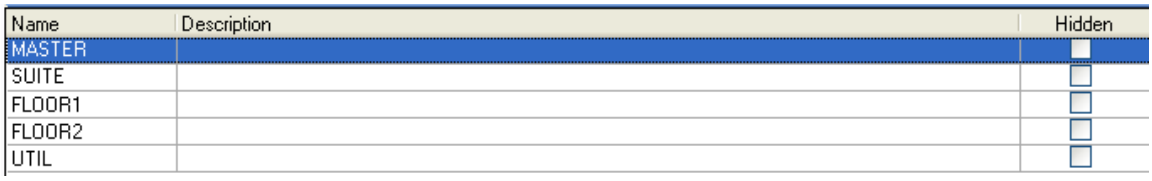
To access this screen:

1) From any screen, click

2) Click 

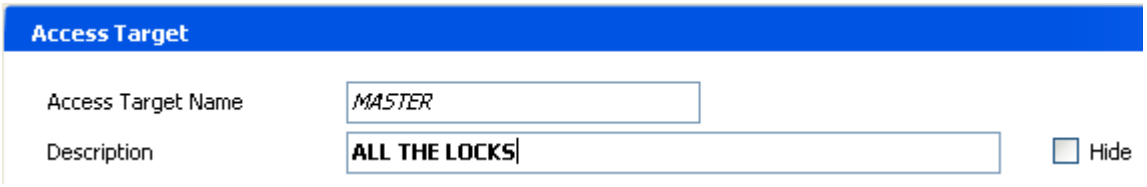
EDIT ZONE PARAMETERS

1) Click on the desired zone from the list:



Name	Description	Hidden
MASTER		☐
SUITE		☐
FLOOR1		☐
FLOOR2		☐
UTIL		☐

2) Click
3) **Description**: will show up next to the zones name when creating a new card.
Hide: if selected, the zone will not be visible when creating new cards.



4) Click to accept changes or to cancel.

PRINT ZONE LIST

Click and choose whether to print or to export the zone list from the separate screen which opens.

BEDS

This screen reports the list of the beds included in the plant restored on the Smart Software.

Beds function is a special configuration that allows issuing up to 7 guest cards for the same room with different time validities. Every new guest card for a bed invalidates the previous one for the same bed; every new guest card for the whole room invalidates all the guest cards for the single beds. This feature is available only if it has been set during plant installation.

Case of use: the reception of an hostel can issue cards for a whole room or for one single bed inside the room.

To access this screen:

1) From any screen, click

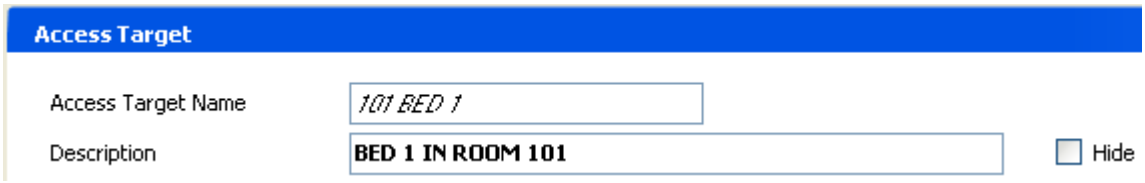
2) Click

EDIT BED PARAMETERS

1) Click on the desired bed from the list:

Name	Description	Hidden
101 BED 1		☐
101 BED 2		☐
101 BED 3		☐
102 BED 1		☐

2) Click
3) **Description**: will show up next to the beds name when creating a new card.
Hide: if selected, the bed will not be visible when creating new cards.

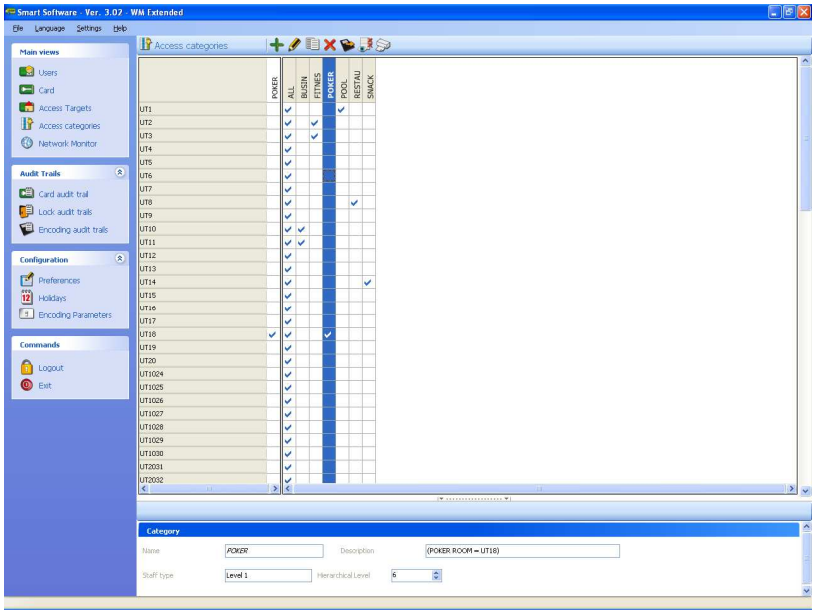


4) Click to accept changes or to cancel.

PRINT BED LIST

Click and choose whether to print or to export the bed list from the separate screen which opens.

CATEGORIES



This screen allows to manage the categories included in the plant restored on the Smart Software.

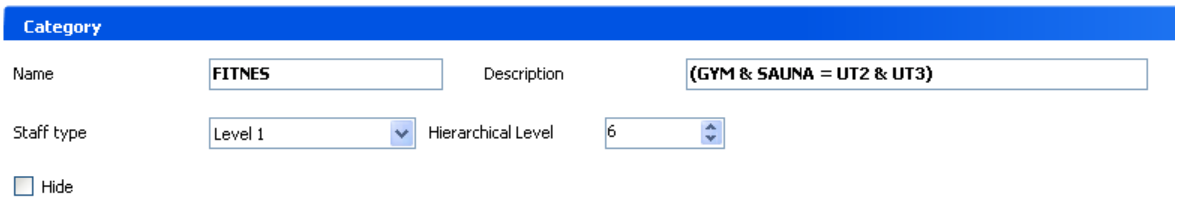
Categories are groups of **utility** doors: it is possible to create several categories according to the different needs. After having defined a utility pattern, it is possible to use it more times for different cards. Categories can be created directly on the Encoder or through the Smart Software.

ADD CATEGORIES

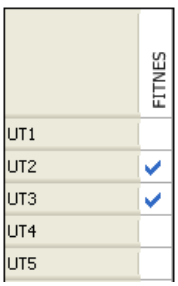
1) From any screen, click

2) Click

3) **Name**: category identification.
Description: will show up next to the category name when creating a new card.
Staff type: this will be the type of a Staff card created with access to this category.
Hierarchical level: minimum level of an Operator who can use this category.
Hide: if checked, the category can be easily hidden from the Categories screen.



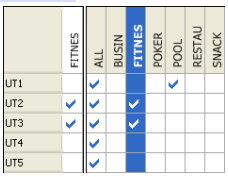
4) Select which utilities will be included in this category:



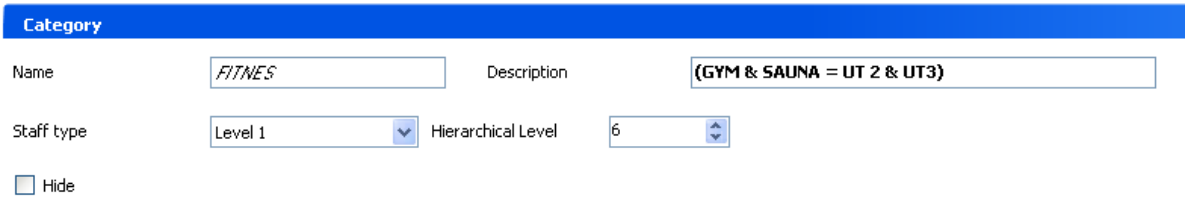
5) Click to accept changes or to cancel.

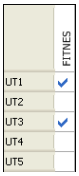
EDIT CATEGORIES

1) From any screen, click

2) Click on the desired category to edit: 

3) Click
4) **Description**: will show up next to the category name when creating a new card.
Staff type: this will be the type of a Staff card created with access to this category.[6]
Hierarchical level: minimum level of an Operator who can use this category.[6]
Hide: if checked, the category can be easily hidden from the Categories screen.



5) Select which utilities will be included in the new category[6] 

6) Click to accept changes or to cancel.

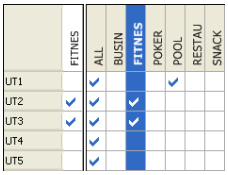
DELETE CATEGORIES

This operation allows to delete, if possible, the categories. In particular:

- a category with **active** cards associated to it can **never** be deleted;
- a category with **non-active** cards only associated to it can be deleted if the Preferences option ☐ Allow deleting categories associated to non-active cards has been selected;
- a category with **no cards** associated to it can be deleted.

To delete a category:

1) From any screen, click

2) Click on the desired category to delete: 

3) Click and confirm.
4) If the category cannot be deleted, this message appears:

[6] This edit is available only if the category has not been assigned to any card yet.

COPY CATEGORIES

This operation allows to create a new category starting from an already existing one.

1) From any screen, click

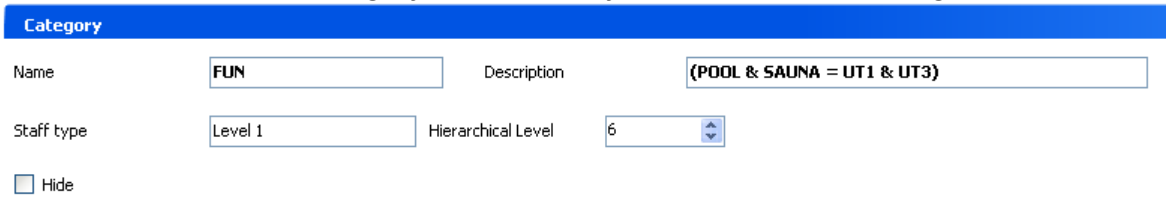
2) Click on the desired category to copy:

	FITNES
UT1	
UT2	✓
UT3	✓
UT4	
UT5	

	ALL	BUSIN	FITNES	POKER	POOL	RESTAU	SNACK
UT1	✓				✓		
UT2	✓		✓				
UT3	✓		✓				
UT4	✓						
UT5	✓						

3) Click

4) **Name**: new category identification.
Description: will show up next to the category name when creating a new card.
Staff type: this will be the type of a Staff card created with access to this category.
Hierarchical level: minimum level of an Operator who can use this category.
Hide: if checked, the category can be easily hidden from the Categories screen.



5) Select which utilities will be included in the new category:

	FUN
UT1	✓
UT2	
UT3	✓
UT4	
UT5	

6) Click to accept changes or to cancel.

LOAD CATEGORIES

This operation allows to load on the Smart Software the categories stored on the Encoder.

1) From any screen, click

2) Click

SHOW DELETABLE CATEGORIES

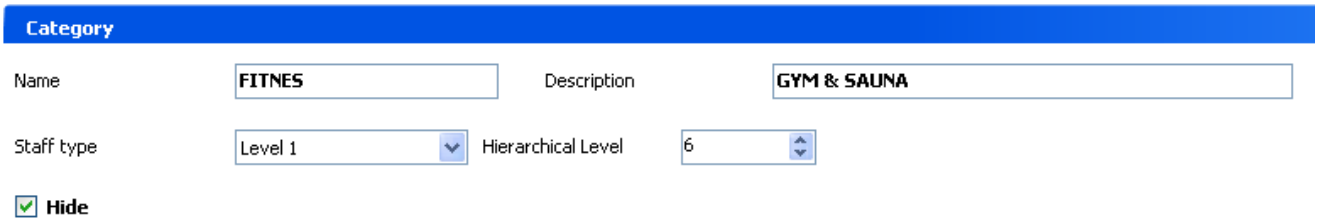
With this operation, it is possible to visualize only the **deletable** categories; a category is considered deletable if there are no active cards associated to it. To enable this feature:

1) From any screen, click

2) Click . To view all the categories again, just press a second time.

HIDE/SHOW 'HIDDEN' CATEGORIES

With this operation, it is possible to hide from visualization the categories marked as **hidden**; a category is considered hidden if the correspondent checkbox is checked during its creation or its editing.



To enable this feature:

1) From any screen, click

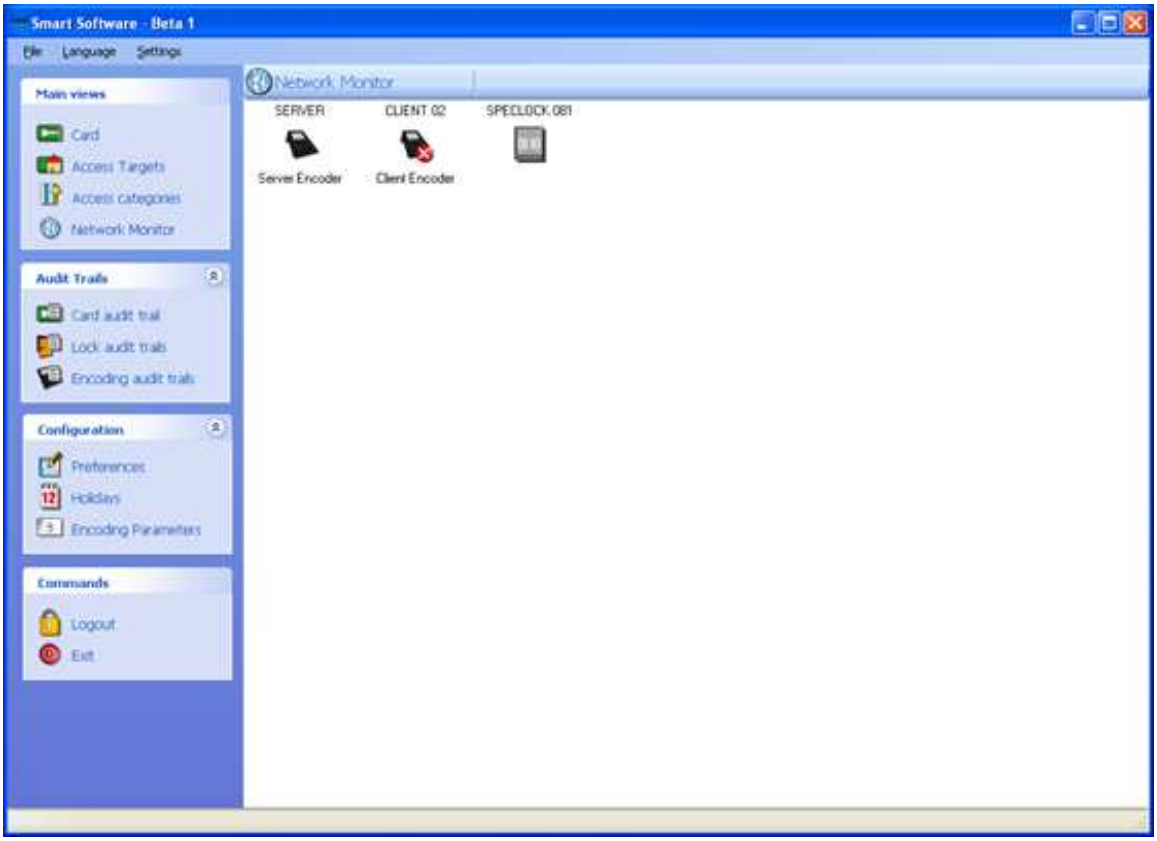
2) Click . To view all the categories again, just press a second time.

PRINT CATEGORY LIST

This operation allows to print the category list on paper or to export it in several formats.

1) Click
2) A new window with a detailed list opens. Click to print the list or to export it.

NETWORK MONITOR



This screen shows the devices which are included into the on-line network.

To access, from any screen, click

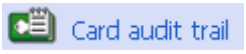
Each device is represented with an icon and its description:

If a device is temporarily off-line, it will be represented as follows:

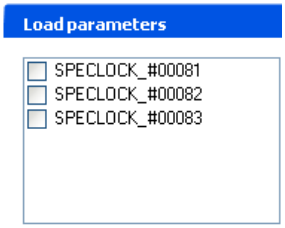
CARD AUDIT TRAIL

Each card with “History on Card” enabled on it keeps in memory all the operations done. When one of these cards is presented to an on-line special lock with the “Upload history” function enabled, the card history is downloaded to the locks memory.

To extract this information from the special lock and to visualize it in the Smart Software:

1) From any screen, click 

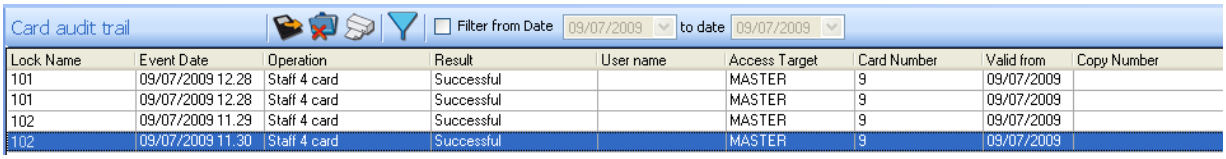
2) Click

3) A new window in the bottom of the screen will appear.
Select which special lock is to be downloaded: 

4) Choose whether to collect also the oldest events

5) Click to accept or to cancel.

6) The screen will populate with the card history downloaded from the special lock:



Lock Name	Event Date	Operation	Result	User name	Access Target	Card Number	Valid from	Copy Number
101	09/07/2009 12.28	Staff 4 card	Successful		MASTER	9	09/07/2009	
101	09/07/2009 12.28	Staff 4 card	Successful		MASTER	9	09/07/2009	
102	09/07/2009 11.29	Staff 4 card	Successful		MASTER	9	09/07/2009	
102	09/07/2009 11.30	Staff 4 card	Successful		MASTER	9	09/07/2009	

FEATURES
Once the card history has been loaded, it is possible to:

Clear the list of card history events;

Print or export the list of card history events;

Search from the event list, using one or more criteria;

Filter and visualize only the list elements belonging to a certain time interval.

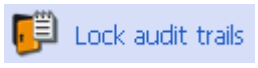
LOCK AUDIT TRAIL

The operations performed on a lock can be numerous: for example, initialization, reset, opening. It is possible to download the events (stored in the lock memory) of:

- an on-line special lock, directly through the Smart Software;
- a wireless lock, directly through the Smart Software;
- a stand-alone lock, using
  - an HHI device (in which the history will be downloaded), then the Smart Software;
  - an history download card, with History on Card function.

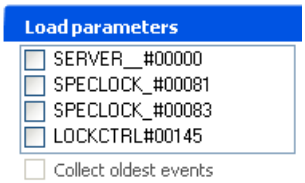
The events of **wireless locks** are automatically visualized on the Smart Software, with a latency time of 1 minute. Alternatively, it is possible to force the event download by performing the procedure described below.

To visualize the events of **special**, **wireless** or **stand-alone (via HHI)** locks:

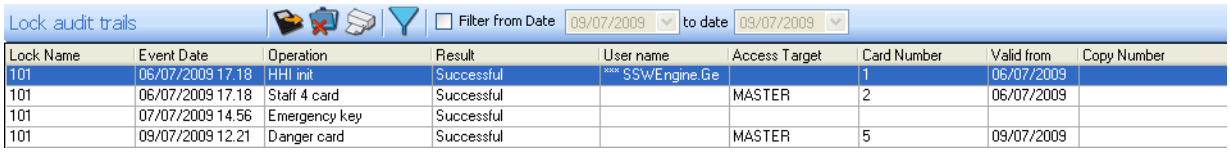
1) From any screen, click 

then

2) A new window in the bottom of the screen will appear. Select which HHI device, on-line special lock or wireless controller[7] is to be downloaded:



3) Choose whether to collect also the oldest events
4) Click to accept or to cancel.
5) The screen will populate with the downloaded lock history:



Lock Name	Event Date	Operation	Result	User name	Access Target	Card Number	Valid from	Copy Number
101	06/07/2009 17.18	HHI init	Successful	*** SSWEngine.Ge		1	06/07/2009	
101	06/07/2009 17.18	Staff 4 card	Successful		MASTER	2	06/07/2009	
101	07/07/2009 14.56	Emergency key	Successful					
101	09/07/2009 12.21	Danger card	Successful		MASTER	5	09/07/2009	

To visualize the events of **stand-alone locks (with history download card):**

1) From any screen, click

then

2) Press Ok to start, the present the card to the reader.

FEATURES

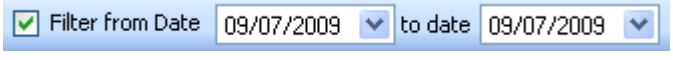
Once the lock history has been loaded, it is possible to:

Clear the list of lock history events;

Print or export the list of lock history events;

Search from the event list, using one or more criteria;

Filter and visualize only the list elements belonging to a certain time interval.



[7] When selecting a wireless controller, the history of all the locks connected to it will be downloaded.

ENCODING AUDIT TRAIL

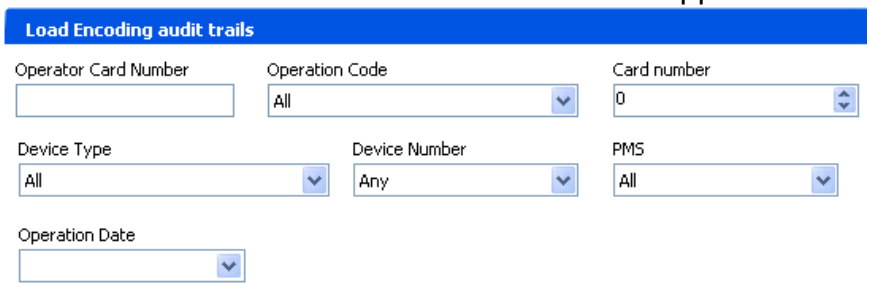
The operations effected by an encoder device can be numerous; all of these events are stored in its memory.

To extract this information from the encoder and to visualize it in the Smart Software:

1) From any screen, click

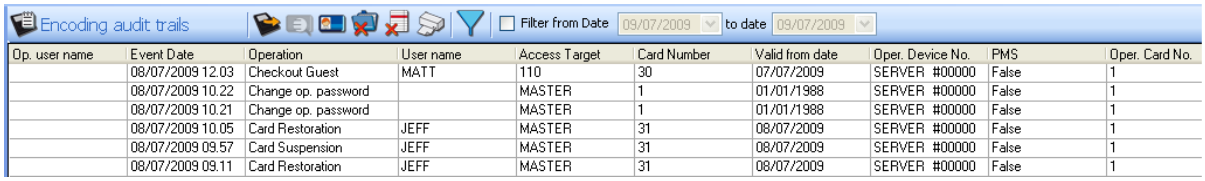
2) Click

3) A new window in the bottom of the screen will appear. Select the desired values:



4) Click to accept or to cancel.

5) The screen will populate with the downloaded encoder history:



Op. user name	Event Date	Operation	User name	Access Target	Card Number	Valid from date	Oper. Device No.	PMS	Oper. Card No.
	08/07/2009 12.03	Checkout Guest	MATT	110	30	07/07/2009	SERVER #00000	False	1
	08/07/2009 10.22	Change op. password		MASTER	1	01/01/1988	SERVER #00000	False	1
	08/07/2009 10.21	Change op. password		MASTER	1	01/01/1988	SERVER #00000	False	1
	08/07/2009 10.05	Card Restoration	JEFF	MASTER	31	08/07/2009	SERVER #00000	False	1
	08/07/2009 09.57	Card Suspension	JEFF	MASTER	31	08/07/2009	SERVER #00000	False	1
	08/07/2009 09.11	Card Restoration	JEFF	MASTER	31	08/07/2009	SERVER #00000	False	1

FEATURES

Once the encoder history has been loaded, it is possible to:

View card data: the data of the card on which the operation was done are visualized;

View Operator card data: the data of the Operator card used to access are visualized;

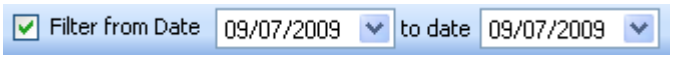
Clear the list of encoder history events;

Remove encoding event: the selected encoding event is removed;

Print or export the list of history events;

Search from the event list, using one or more criteria;

Filter and visualize only the list elements belonging to a certain time interval.



PREFERENCES

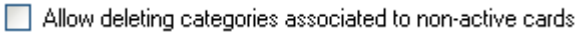
This screen allows to edit several settings, to enable different Smart Software features.

To access this screen and edit any information:

1) From any screen, click

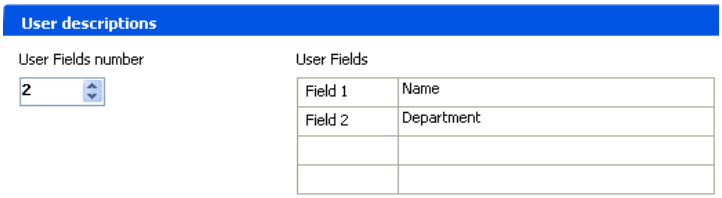
2) Click
3) Edit the desired fields.
4) Click to accept or to cancel.

GENERAL



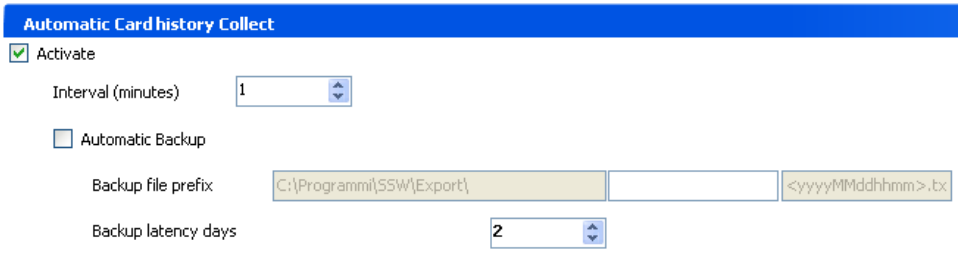
If this checkbox is selected, it is possible to delete categories with **non-active** cards only associated to it.

USER DESCRIPTIONS



This section allows to **enable** the User management, by setting the desired number of User Fields and their description.

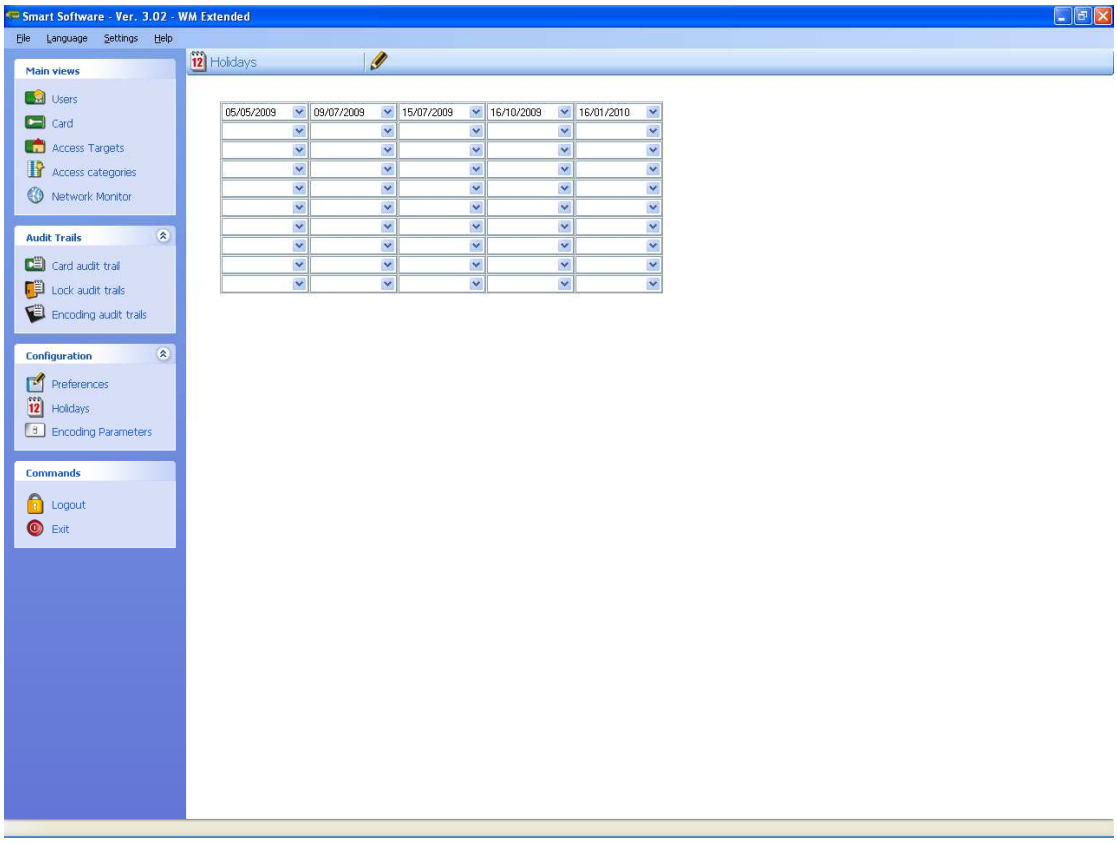
AUTOMATIC CARD HISTORY AND LOCKS EVENTS COLLECT



These two sections allow to set the automatic collection of **Card History** and **Locks Events**; if enabled, the events will be automatically loaded on the Smart Software.

This feature can be enabled by selecting the correspondent checkbox and by setting the time interval of collection.
In addition, it is possible to export the older data in text files: by setting the path for the files, all the data older by the days set in the proper field will be saved.

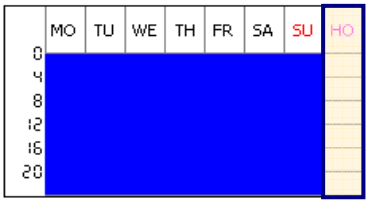
HOLIDAYS



This screen allows to set the days of the year considered as **holidays**. These days are a distinct category of days for which it is possible to set particular Time Shifts when creating new Staff, User or Operator cards.

TimeShift

Start Time 1	End Time 1	Start Time 2	End Time 2	MO	TU	WE	TH	FR	SA	SU	HO
00:00	23:45	00:00	00:00	☑	☑	☑	☑	☑	☑	☑	☐
00:00	00:00	00:00	00:00	☐	☐	☐	☐	☐	☐	☐	☐
00:00	00:00	00:00	00:00	☐	☐	☐	☐	☐	☐	☐	☐
00:00	00:00	00:00	00:00	☐	☐	☐	☐	☐	☐	☐	☐



To set the holidays:

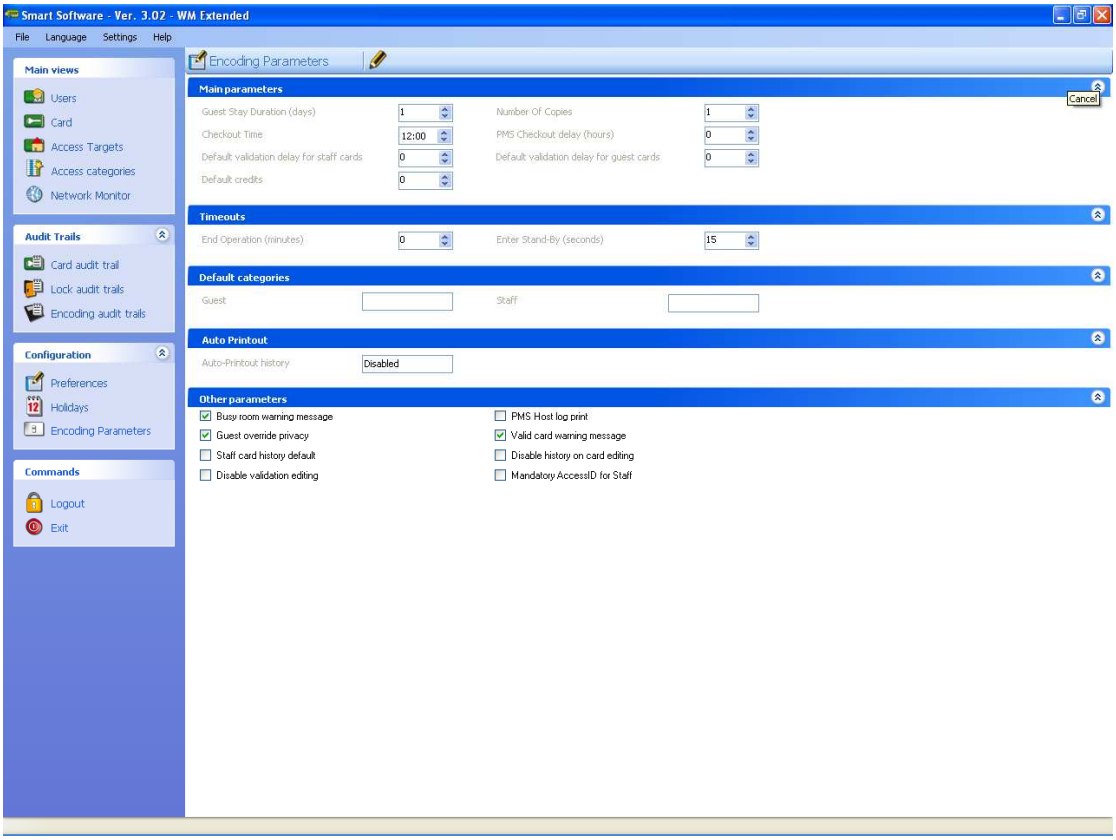
1) From any screen, click

2) Click

3) Click on any drop down box and select a date from the calendar which opens:

4) Click to accept or to cancel.

ENCODING PARAMETERS



This screen allows to change several parameters used by the encoding system.

To access this screen and change the parameters:

1) From any screen, click

2) Click
3) Switch off and then again on the Server device.
4) Click Ok in the message window which opens.
5) Edit the parameters.
6) Click to accept or to cancel.

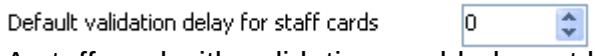
MAIN PARAMETERS

To set the default validity for guest cards.

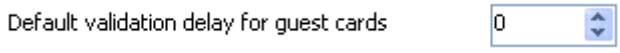
To set the default number of copies of an issued guest card.

To set the default checkout time for guest cards.

This delay is added to the checkout time sent by the PMS to obtain the effective one.



A staff card with validation enabled must be validated before this time interval expires.



A guest card with validation enabled must be validated before this time interval expires.

These are the default credits assigned to an issued guest card.

TIMEOUTS

When the encoder remains inactive for this time period, it logs out.

When a card is read on the encoder, the data are visualized on the screen for this time period.

DEFAULT CATEGORIES

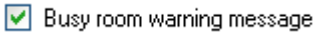
This is the default category for an issued guest card.

This is the default category for an issued staff card.

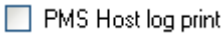
AUTO PRINTOUT

If this parameter is enabled, each time an encoder with parallel port creates a card, its data are sent to the connected printer.

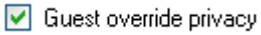
OTHER PARAMETERS



When issuing a guest card, if the target room is busy, a warning message appears.

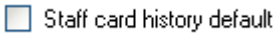


To enable the creation of a log file for the communication between encoder and PMS.

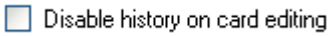


To issue guest cards with the Override privacy function active.

When writing a credential on a valid physical card, a warning message appears.



To issue staff cards with History on Card active by default.



When issuing a new card, the operator cannot edit the History on Card status.

When issuing a new card, the operator cannot edit the validation status.

When creating a new user, it is mandatory to fill all the user fields.

APPENDIX

The following tables list the limits of each configuration compatible with the Smart Software:

MY/MYMOBILE (formerly CS9580SMART)

	512K (No Cr.)	512K	1M	1,5M	512K Beds	1M Beds	SSHR (M102)	1,5M H.NY	512K [M201 Beds]	512K Beds (Account)	1M Beds (Account)	512K [M210Beds] (Account)
Locks	950	950	1800	2400	700	1600	4000	2900	300	700	1600	300
Common + Utilities	95+16	95+16	80+16	240+16	70+16	160+16	2436+16	290+16	30+16	135+16	225+16	95+16
Zones	190	190	360	480	140	320	800	580	60	140	320	60
Suites (Guests)	48	48	63	63	35	63	63	63	15	36	63	15
Beds	0	0	0	0	2100	4800	0	0	900	2100	4800	900
Encoder History	6650	4750	12600	12000	4900	11200	7250	14500	2100	4900	11200	2100
Issued Cards	7600	6175	14400	16383	5600	12800	8280	16383	2400	5600*	12800*	2400*
Operators	458	458	600	700	417	567	867	783	150	418	568	150
Categories	316	316	599	799	232	532	1332	966	99	233	533	100

SMART CARD CS9800 NORMAL

	512K	1M	1,5M	512K Beds	1M Beds	L.UCF	512K [M201 Beds]	8MB [M180b Beds]
Locks	500	1200	2400	500	1200	1024	300	5000
Common + Utilities	50+1024	120+1024	240+1024	50+1024	120+1024	102+1024	30+1024	500+1024
Zones	100	240	480	100	240	51	60	1000
Suites (Guests)	25	60	63	25	60	26	15	250
Beds	0	0	0	1500	3600	0	900	15000
Encoder History	3500	8400	12000	3500	8400	10000	2100	32767
Issued Cards	3500	8400	14400	3500	8400	10000	2400	16383
Operators	383	500	700	383	500	249	150	1134
Categories	293	705	1199	293	705	3699	175	2940

EXTENDED

M305 2M	M305 8M
1500	5000
2182	2389
300	1000
75	250
0	0
10500	32766
12000	16382
350	933
1000	5000

WAVE

	512K [M201 Beds] Wave Hotel
Locks	300
Common + Utilities	30+16
Zones	60
Suites (Guests)	15
Beds	900
Encoder History	2100
Issued Cards	2400
Operators	150
Categories	99

WAVE HOTEL (SERVER / MIRROR)

	512K [M201] Wave Hotel Server / Mirror	512K [M210 Beds] Wave Hotel
Locks	950	700
Common + Utilities	95+16	70+16
Zones	190	140
Suites (Guests)	48	35
Beds	0	2100
Encoder History	4750	4900
Issued Cards	6175	5600
Operators	258	217
Categories	316	232

WAVE MODE

	512K [M201 Beds] Wave Mode	512K [M201 Beds] Wave Mode 650 Rooms	M305 2 Mega Wave Mode	M305 8 Mega Wave Mode	M305 2 Mega (Account Code) Wave Mode	M305 8 Mega (Account Code) Wave Mode
Locks	500	650	1500	5000	1500	5000
Common + Utilities	50+1024	65+1024	2182	2389	2182	2389
Zones	100	130	300	1000	300	1000
Suites (Guests)	25	33	75	250	75	250
Beds	1500	0	4500	15000	4500	15000
Encoder History	2000	2600	10500	32766	10500	32766
Issued Cards	3250	3250	12000	16382	12000	1638
Operators	183	208	350	933	350	933
Categories	250	324	749	2499	749	2499

The following table lists the maximum number of operations which can be stored in each card type (with Keyplan 1024):

Card type	Number of storable operations
CS3	30
CS4	0
CS7 Enhanced	30
CT3	0
CT4	30
MIFARE 1KB	36
MIFARE 4KB	372

Ingersoll Rand
Security Technologies

Ingersoll Rand's Security Technologies Sector is a leading global provider of products and services that make environments safe, secure and productive. The sector's market-leading products include electronic and biometric access-control systems; time-and-attendance and personnel scheduling systems; mechanical locks; portable security; door closers, exit devices, architectural hardware, and steel doors and frames; and other technologies and services for global security markets.

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